NC/QC/YPD/SIP-01/2017-18/SP-W2 Date: 26-03-2018

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Improvements to Cross roads and drains at Srinivasapura.}
Ref.: Material testing/PMC/17-18,
Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	**100.00**	100
45.00	**97.15**	95-100
26.50	**---**	-
22.40	**72.25**	60-80
11.20	**54.05**	40-60
4.75	**36.45**	25-40
2.36	**21.00**	15-30
0.600	**16.55**	8-22
0.075	**4.10**	0-5

*As Furnished by Client
The Results relate only to the items tested

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

NEWZEN CONSULTANTS BANGALORE, #19,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080-23240187 EMAIL:newzen576@gmail.com

Date: 26-03-2018

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	**25.85 %**	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	**27.03 %**	Not more than 35.0 %
3.	Water absorption, %	**0.39 %**	Not more than 2.0 %
4.	Plasticity Index, %	**NP**	Not more than 6.0 %

*As furnished by Client.

Note: The Results relate only to the items tested

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

NEWZEN CONSULTANTS BANGALORE, #13, 10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231,

Newzen Consultants Bangalore

NC/QC/YPD/SIP-01/2017-18/SP-W3 Date: 27-03-2018

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Improvements to Cross roads and drains at Srinivasapura.}
Ref.: Material testing/PMC/17-18,
Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	**100.00**	100
45.00	**97.45**	95-100
26.50	**---**	-
22.40	**76.10**	60-80
11.20	**54.60**	40-60
4.75	**36.75**	25-40
2.36	**23.80**	15-30
0.600	**17.35**	8-22
0.075	**4.20**	0-5

*As Furnished by Client
The Results relate only to the items tested

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

NEWZEN CONSULTANTS BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231,

Newzen Consultants Bangalore

Date: 27-03-2018

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	**26.72 %**	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	**27.43 %**	Not more than 35.0 %
3.	Water absorption, %	**0.40 %**	Not more than 2.0 %
4.	Plasticity Index, %	**NP**	Not more than 6.0 %

*As furnished by Client.

Note: The Results relate only to the items tested

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

NEWZEN CONSULTANTS BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231,

Newzen Consultants Bangalore

NC/QC/YPD/SIP-01/2017-18/SP-B1 Date: 28-03-2018

1. TEST REPORT ON BITUMEN SAMPLE:

Sub: Testing of Bitumen sample VG-30 Grade.
{Project*: Improvements to Cross roads and drains at Srinivasapura.}
Ref.: Material testing/PMC/17-18,
Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s KRIDL, Bangalore.
Technical Reference: Ministry of Road Transport and Highways, V Revision, 2013 and IS 73: 1992.

TABLE 1.1 ;

SL No	Details	Test Results	Requirements as per I.S 73 –1992 Specifications
1.	Penetration at 25^0 C	**54.00^0 C**	Min. 45
2.	Ductility Value at 25^0 C	**116 cm**	40
3.	Flash point	**232^0 C**	Minimum 220^0 C
4.	Softening point	**51.25^0 C**	Min. 47

*As furnished by Client.
The results relate only to the samples tested.

K...R
KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore
Proprietor

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

NEWZEN CONSULTANTS BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187 EMAIL:newzen576@gmail.com

NC/QC/YPD/SIP-01/2017-18/SP-CA2 **Date: 28-03-2018**

1. TEST REPORT ON COARSE AGGREGATE:

Sub: Testing of Coarse Aggregate used in Dense Graded Bituminous Macadam.
{Project*: Improvements to Cross roads and drains at Srinivasapura.}
Ref.: Material testing/PMC/17-18,
Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

TABLE 1.1 ;

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	**25.04%**	Not more than 27.00 % for DBM
2.	Combined Flakiness and Elongation index, %	**27.12 %**	Not more than 35.0 %
3.	Water absorption, %	**0.35 %**	Not more than 2.0 %
4.	Specific gravity	**2.48**	-------
5.	Soundness	**5.96 %**	Max. 12 % in Sodium Sulphate

*As furnished by Client.
The results relate only to the samples tested.

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore
Proprietor

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

NEWZEN CONSULTANTS BANGALORE, #13, 1ST MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187 EMAIL :newzen576@gmail.com

Newzen Consultants Bangalore

NC/QC/YPD/SIP-01/2018-19/SP-DM1 Date: 02-04-2018

1.TEST REPORT ON BITUMINOUS MIXES :
(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.
{Project*: Improvements to Cross roads and drains at Srinivasapura.}
Ref.: Material testing/PMC/17-18,
Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**
1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.51 %**

2. **Gradation Test**
TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	**100**	100
26.5	**98.10**	90-100
19.0	**85.45**	71-95
13.20	**77.05**	56-80
4.75	**49.60**	38-54
2.36	**36.15**	28-42
0.300	**18.30**	7-21
0.075	**5.45**	2-8

*As Furnished by Client.
The Results relate only to the items tested.

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP

NEWZEN CONSULTANTS BANGALORE, #13, 10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187 EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore.

NC/QC/YPD/SIP-01/2018-19/SP-DBM2 Date: 03-04-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.
{Project*: Improvements to Cross roads and drains at Srinivasapura.}
Ref.: Material testing/PMC/17-18,
Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.53 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	**100**	100
26.5	**97.45**	90-100
19.0	**89.10**	71-95
13.20	**65.30**	56-80
4.75	**47.10**	38-54
2.36	**39.75.**	28-42
0.300	**19.55**	7-21
0.075	**5.30**	2-8

*As Furnished by Client.
The Results relate only to the items tested.

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

Asst. Executive Engineer
Project Division
Yelahanka
Bangalore

NEWZEN CONSULTANTS BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187 EMAIL :newzen576@gmail.com

NC/QC/YPD/SIP-01/2018-19/SP-CA3 Date: 30-03-2018

1. TEST REPORT ON COARSE AGGREGATE:

Sub: Testing of Coarse Aggregate used in Bituminous Concrete.
{Project*: Improvements to Cross roads and drains at Srinivasapura.}
Ref.: Material testing/PMC/17-18,
Report Reqtired for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

TABLE 1.1 ;

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	**23.13 %**	Not more than 24.00 %
2.	Combined Flakiness and Elongation index, %	**25.96%**	Not more than 35.0 %
3.	Water absorption, %	**0.36 %**	Not more than 2.0 %
4.	Specific gravity	**2.55**	-------
5.	Soundness	**6.76 %**	Max. 12 % in Sodium Sulphate

*As furnished by Client.
The results relate only to the samples tested.

K—R
KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore
Proprietor

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

NEWZEN CONSULTANTS BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187 EMAIL:newzen576@gmail.com

NC/QC/YPD/SIP-01/2018-19/SP-BC1 Date: 04-04-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for BC mix sample.
{Project*: Improvements to Cross roads and drains at Srinivasapura.}
Ref.: Material testing/PMC/17-18,
Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

TEST RESULTS

A. Type of Construction : **Bituminous Concrete**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **5.43 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-17 of MORTH Specfications-2013 BC (Grading - 2)
19.0	**100**	100
13.2	**98.10**	90-100
9.5	**76.25**	70-88
4.75	**65.45**	53-71
2.36	**52.00**	42-58
1.18	**40.35**	34-48
0.600	**32.05**	26-38
0.300	**24.80**	18-28
0.150	**19.15**	12-20
0.075	**8.05**	4-10

*As Furnished by Client.
The Results relate only to the items tested.

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

Asst. Executive Engineer
Project Division
Yelahanka
Bangalore

NEWZEN CONSULTANTS BANGALORE, #13-10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187 EMAIL:newzen576@gmail.com

NC/QC/YPD/SIP-01/2018-19/SP-BC2 Date: 05-04-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for BC mix sample.
{Project*: Improvements to Cross roads and drains at Srinivasapura.}
Ref.: Material testing/PMC/17-18,
Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s KRIDL, Bangalore.

TEST RESULTS

A. Type of Construction : **Bituminous Concrete**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **5.42 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-17 of MORTH Specfications-2013 BC (Grading - 2)
19.0	**100**	100
13.2	**95.25**	90-100
9.5	**85.60**	70-88
4.75	**64.00**	53-71
2.36	**52.95**	42-58
1.18	**41.60**	34-48
0.600	**33.00**	26-38
0.300	**26.05**	18-28
0.150	**17.45**	12-20
0.075	**7.20**	4-10

*As Furnished by Client.
The Results relate only to the items tested.

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore
Proprietor

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

NEWZEN CONSULTANTS BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187 EMAIL:newzen576@gmail.com